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DIVISION OF FOREST PEST CONTROL

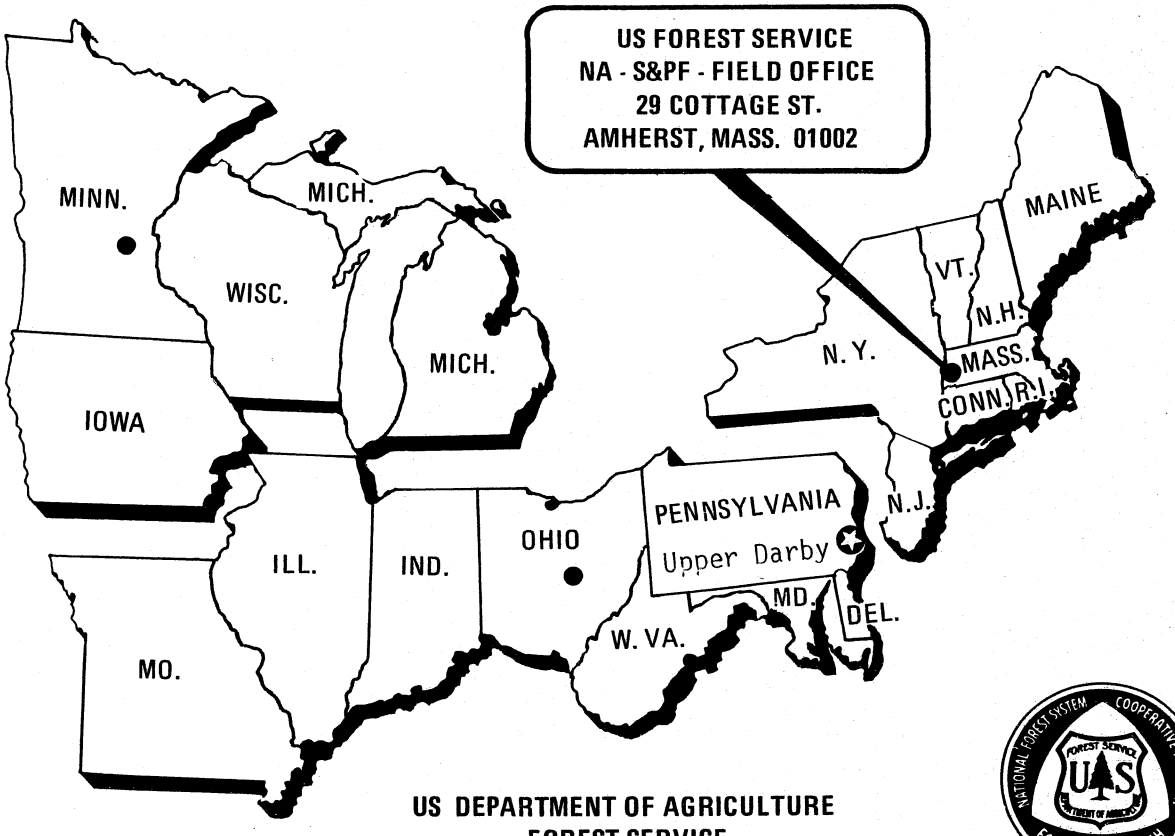
Northeastern Area State & Private Forestry

A-68-10 DETECTION REPORT ? Evaluation ? 5220

Detection of Spruce-Fir Insects and Diseases on the White Mountain National Forest

by
James S. Hadfield, Pathologist

July 1968



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July 22, 1968

Detection of Spruce-Fir Insects and Diseases on the White Mountain National Forest

by

James S. Hadfield, Pathologist

U. S. Department of Agriculture - Forest Service
Northeastern Area, State and Private Forestry
Amherst FPC Field Office, Amherst, Massachusetts

INTRODUCTION

On June 25 and 26, James Hadfield, Pathologist and William Buzzard, Forestry Technician, examined several of the spruce-fir mortality areas on the White Mountain National Forest. The purposes of this examination were:

1. To determine if the drought induced spruce-fir mortality had ended.

2. To check the rate of deterioration of dead timber and slash.

Detection & Evaluation objective?

During this examination the crew's attention was drawn to other pest and physiological problems.

SURVEY RESULTS

The drought induced spruce-fir mortality is still continuing but at a very slow rate. Secondary factors such as bark beetles and fungi are attacking the weakened trees.

The dead timber and slash is deteriorating at a slow rate. There are very few wood boring insects in the wood. Shoestring root rot was present on only 10% of the dead trees examined at the height of land on the Kancamagus Highway. There is still a great fire hazard at this site.

PROBLEMS DETECTED

Winter Injury - Cause, warm winter winds which cause the needles to transpire while the roots are frozen.

Tree Species Affected - Red spruce and Balsam fir

Acres Affected - 10,000 - 15,000

Location - Mt. Huntington, Mt. Kancamagus, Livermore Wildlife Management Area, Mt. Washington, Great Gulf, Pinkham's Notch

Remarks - The winter injury is confined to spruce and fir at high elevations. The trees were not killed. Last year's foliage was severely damaged. This year's buds have emerged on most trees examined.

Bark Beetles - Orthotomicus caelatus (Eichhoff)

Tree Species Affected - Balsam fir

Acres Affected - Unknown

Location - The bark beetles were found on living fir inside the mortality areas at the height of land on the Kancamagus Highway and in the Great Gulf half-way between the toll gate and the Half-way House.

Remarks - These beetles were found only on firs with small crowns. We could not find the beetles on vigorous trees.

Balsam Woolly Aphids - Chermes piceae (Ratz.)

Tree Species Affected - Balsam fir

Acres Affected - Unknown

Location - This pest was discovered along the Kancamagus Highway from Rocky Gorge Picnic Ground to Lilley Pond. It was also found in the Great Gulf.

Remarks - The affected trees we examined along the Kancamagus Highway were dead. They are bright red and plainly visible for ½ mile. The fir in the Great Gulf was not dead. The branches were gouty and the tops had spread out like tables.

Jim
What action do they plan here? 9/3
You may want to follow-up on this.

Dave K.

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